

WHAT IS CLAIMED IS:

1. An optical device, comprising:
 - a plurality of optical modulators that respectively modulates a plurality of color lights in accordance with image information;
 - a color-combining optical element that combines the respective color lights modulated by the optical modulators, the color-combining optical element being integrated with the optical modulators;
 - a holding frame that holds the optical modulator and has an opening at a portion corresponding to an image formation area of the optical modulator; and
 - a holder disposed between the holding frame and the color-combining optical element,
 - wherein the holder includes a component having a thermal expansion coefficient lying midway between the thermal expansion coefficients of the holding frame and the color-combining optical element, and
 - wherein the optical modulator is fixed on a side of the color-combining optical element through the holding frame and the holder.
2. The optical device according to claim 1, wherein the holder is a molded article obtained by molding a resin composition composed of a fiber filler and a resin.
3. The optical device according to claim 2, wherein the resin composition is 50 weight % or less of the fiber filler.
- 25 4. The optical device according to any one of claim 1 to 3,
 - wherein holes are formed at least two parts of the holding frame, and
 - wherein the holder has a rectangular plate body having an opening at a position corresponding to the opening of the holding frame and a pin projecting from the rectangular plate body to be inserted to the hole of the holding frame.

5. The optical device according to claim 4, wherein a distal end of the pin is thinner than a base end thereof.

6. The optical device according to claim 5, wherein the holding frame and the holder
5 are fixed by a photo-curing adhesive.

7. The optical device according to any one of claims 4 to 6, wherein a notch for absorbing a deformation result from a thermal stress applied on the rectangular plate body is formed on the rectangular plate body.

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8. A projector, comprising:
an optical device according to any one of claims 1 to 7; and
a projection lens for projecting an image formed by the optical device.

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